Parking

Presentation for Mayor & Council

February 2, 2006

This presentation will highlight some of the topics and issues that are part of the **Parking** White Paper.

Parking is one of the largest land consumers in, urban and suburban areas, which makes the regulation and design of parking a very important issue for a zoning revision.

Issues

- ♦Sufficient Quantity
- ♦Regulations
- ♦Design
- ♦Reducing Demand

Anywhere that vehicles are welcome, parking is a necessity. However, keeping parking attractive, and functioning efficiently is a **balancing** act. Parking is clearly an important issue for the city.

one **priority** is **quantity**. Spillover or the lack of parking causes traffic jams. Excess adds to the heat island effect and leads to unsafe driving behavior. Such as driving through lots as if they are streets, when there are grey-fields or excess parking.

Regulation: Assigned each use with a projected need for parking. And can also use the need for parking can be influenced by access to transit and alternative transportation, and the mixture or proximity of uses.

The **Design** of the parking facilities often is based on How the parking lot is used, landscaping, where the parking is placed, and how parking is screened can have a major impact on how a parking lot is viewed.

Finally, if a goal for the city is to make more a **walkable community**, this affects parking regulations across the board such as size, form, and placement.

Parking Quantity

- Base for Regulations
  - Institute of Transportation Engineers (ITE) Handbook
  - Other Communities' Standards
  - Parking Studies
  - Market/Business Interest
- Ways of Regulating Parking
  - Maximum
  - Minimum
  - median

One of the main issues with parking is the **Quantity**. When the amount parking is lacking people really notice and when there is sea of unused parking people ask why?

The Quantity of parking is effected by land uses, transportation, demographics, time of day or year, and many other factors. All these factors are subject to change and can effect the amount of parking needed.

How those **regulations** are applied can be done by putting a **maximum** or a **minimum** on the quantity based on the use or actives.

Parking requirements often connect the amount of parking space to the area the use. For Example current standards for a restaurant requires minimum of 1 parking space for every 50 square feet of patron area.

Often City, and as in Rockville, the ratio and other requirements for parking are based on ITE handbook standards, other communities, and Parking standards. The market economy or business have ideas of the quantity of needed parking

Minimums

- Prevent Spillover
- Making Each Use Self-Sufficient
- Based on peak demand
- Requirements different for each specific uses

It's easy to make a case for requiring a **minimum** parking spaces. Businesses need a minimum to support their employees, and they also need to support their customers or else they might loose their patronage. Residential areas require minimum off-street parking so that the streets aren't overloaded with vehicles. These minimums, especially with commercial uses are established by the amount necessary during **peak times** (i.e. holiday season).

However there can be problems with this. For the rest of the year these spaces are underutilized. This is a wasted space. The use cannot physically expand, the area is usually unsightly, and because water cannot penetrate the surface it's causing rainwater runoff that could be avoided. Thus the calculation should represent the community or uses' true parking demand.

In essence, it's important to evaluate who, where, and what the parking is serving.

-Location: even if it is commercial parking, are mass transit options located nearby? Is it located in high density development? These conditions suggest that the blanket minimum may not be appropriate.

-Demographic: are those benefiting from the use drivers? Is it serving low-income or senior citizens?

-Fee-in-lieu relates to the developer. Sometimes developers can make deals for a reduction in the minimum requirement

-Amenity Option

Maximums / Area wide Caps

- Restricts the Total Number of Spaces
- Maximum-for a site (i.e. restaurant)
- Area wide-for an area (i.e. town center)
- Can complement Minimum Reg.
  - Creates a threshold on supply
  - Stands alone: letting the market determine the appropriate amount.
- Two small spillover

More cities are revising zoning ordinances to incorporate parking **Maximum** or Area wide caps.

Maximums uses the avg. parking demand not peak to determine the quantity of parking.

Maximum-is a term used for a site and/or any regulation that puts a threshold or limit on parking

Area wide-cap- is a term for an area that has limit threshold.

A maximum parking system encourages compact development, encourages proximity of uses, by limiting the parking area, which encourage **walkable community**

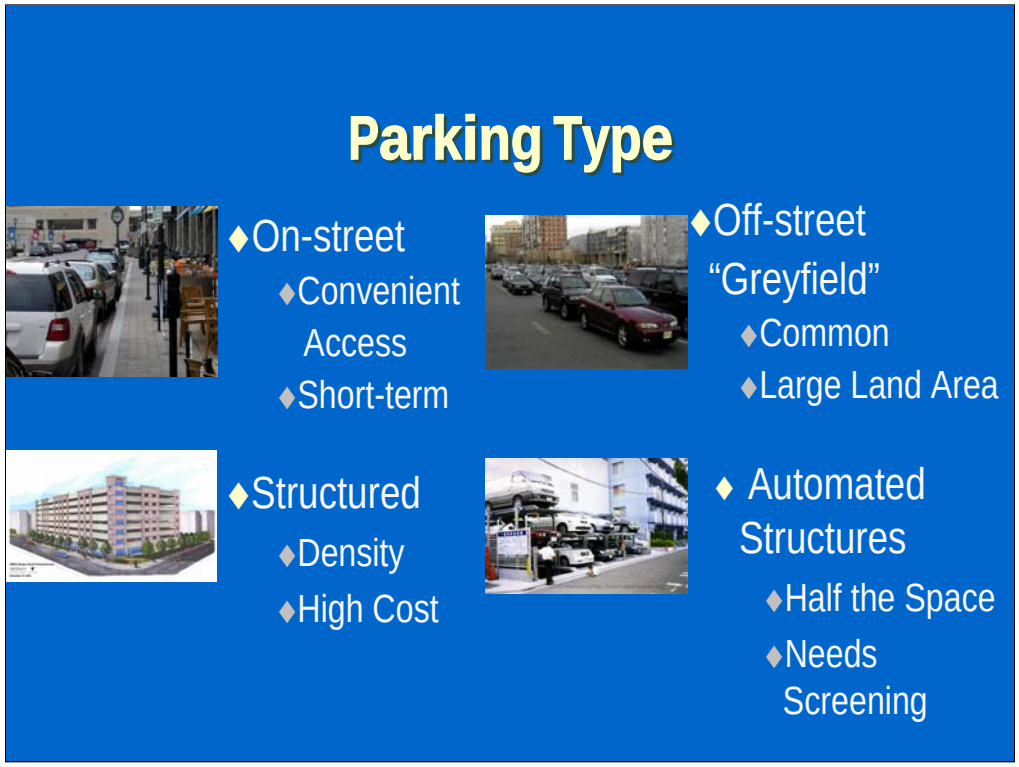
Access to alternative modes of transportation is needed & strong real estate market are needed to prevent spillover.

Little room for mistakes in projecting demand.

It is important that Finical institutions require minimum parking, because the market will all was create a minimum.

Shared

- Will Base Calculations on Computer Program

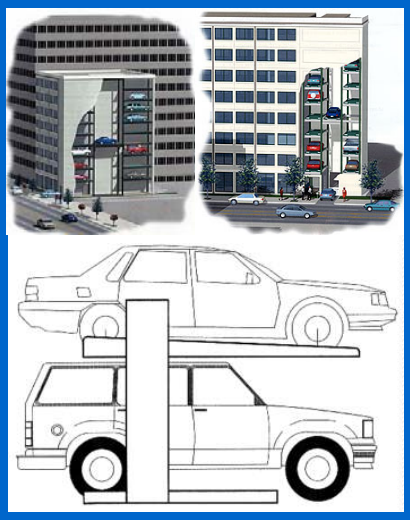


There are four main parking types.

1) is **off-street or greyfield** parking This is the most common type of parking and most zoning ordinance require it. Off-street parking takes up a lot of land area, which can fragment connectivity and affect the walkability of the community. **Parking Arrangements** of off-parking can be done stacked, tandem, valet parking setup.
2) **ON-Street** parking come in three sub-types: **Head-in, Angled, and parallel** parking. Each has it benefit and burden. On-street provides convenient access and encourages **quick turn over** and often is used with off-street parking or structured parking.
3) **Structured** refer to an above or below ground structure that creates level of parking. This type of parking is most affective in areas with high land value, where the high cost of construction is less than the cost of land. Structured parking provides an area with more **density and more walkable community**, because less land area is used and uses are closer together.
4) **Automated Structures** Are used in area were land is limited or value is high. They take up **half the area** that off-street or Structured parking needs. How they are **screened** is important. They are also safer in that they reduce theft.

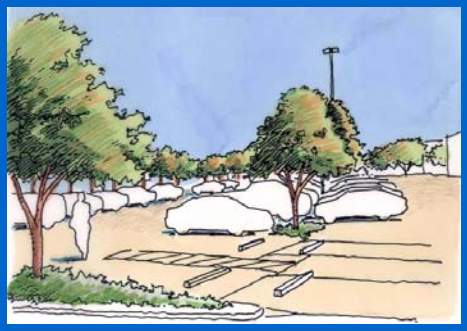
Automated Parking

- Above or Below Ground
- More Effect Use of Land
- Have Been Used in Asia and Europe for Decades
- One Large Scale Garage in Hoboken, NJ



Parking Lot Design

- Landscaping
  - Environmental
  - Break-up parking
  - screen
- Screening
  - Behind Buildings
  - Topography
  - Landscaping
  - Fences/wall
  - Architectural Feature/Facades



Parking is a very visible element in the built environment and its appearance and design are very important.

Vehicle should not be the dominant feature

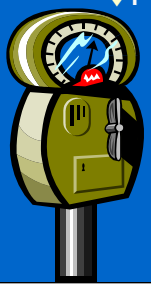
Landscaping can help to **break-up** large expanses of parking,

And it can help with **environmental** concerns with shade trees and pervious land area which can reducing water runoff and the heat island effect. Screen the parking lot which prevents it from being dominate feature in the landscape.

Screening of a parking lot is very important and can be done in a number of ways. Parking can be placed behind buildings, topography like a hill, trees or other landscaping fences or walls and on structured parking Architectural features such as size and form and facades are all important to how a parking lot fits into the landscape.

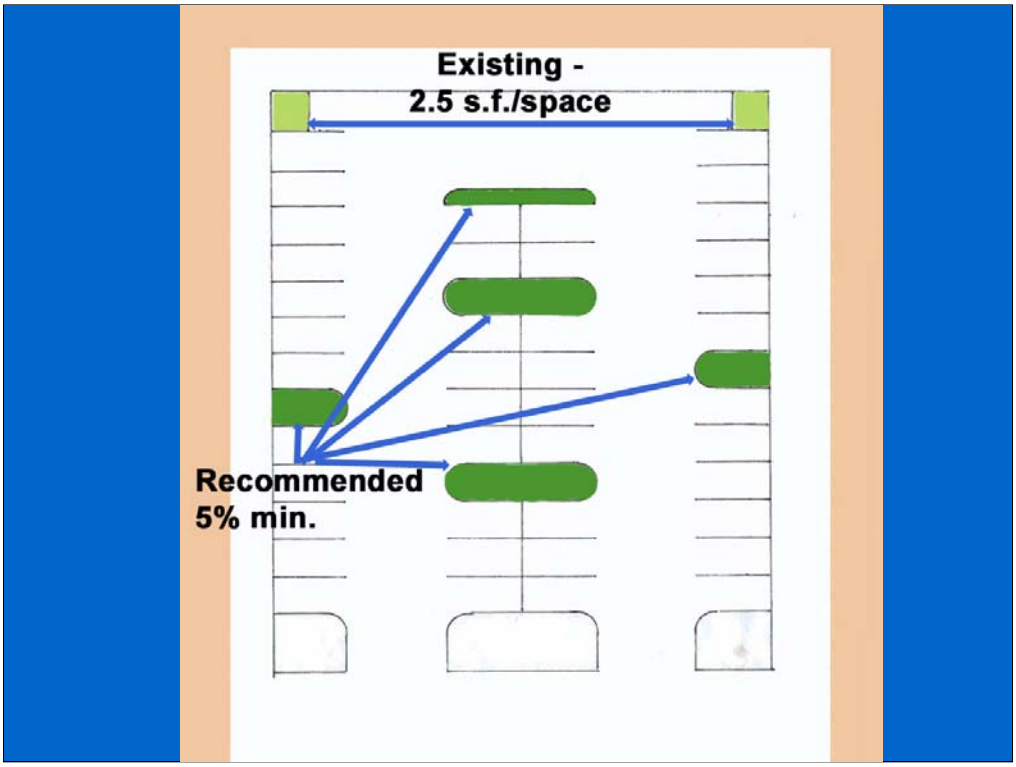
Recommendations

- Maintain residential and Industrial regulations
- Reduce the amount of space dedicated to what are called greyfields (flat asphalt covered parking lots)
- Provide Regulations for Automated structures.



Recommendations

- Increase Landscaping / Screening Requirements
- Provide more design guidance for Garages
- Include a Maximum Parking Cap
- Increase Shared Parking Abilities in Mixed-Use Districts


Existing -
2.5 s.f./space
Recommended
5% min.

Recommendations

- Decrease Size of Parking Spaces
- Require Bike Parking
- Do Not Require Entire Parking Lot to be Paved

Those are the highlights. At this time I'd like to answer any questions that you might have.